

Abstract

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Title of Thesis: In vitro mechanism of action of quinoxaline derivate
VN-034 on the respiratory system

Abstract: The aim of this thesis was to investigate the mechanism of relaxation effect of quinoxaline derivative VN-034 in vitro, and to evaluate the potential of the substance to act as a β -agonist or M-antagonist. The classical in vitro method of isolated trachea was applied. In our experimental work VN-034 did not behave as a competitive β -agonist, however propranolol had an influence on its effect. On β -receptors, detailed mechanism of action could not be determined. On M-receptors, the substance behaved as a competitive antagonist.